

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 77-67

NPDES NO. CA0037877

WASTE DISCHARGE REQUIREMENTS FOR:

SANITARY DISTRICT NO. 1 OF  
MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Board), finds that:

1. Sanitary District No. 1 of Marin County (hereinafter Discharger) by application dated March 8, 1977, has applied for waste discharge requirements and a permit to discharge wastes under the National Pollutant Discharge Elimination System.
2. The discharger presently discharges from their treatment facility into the mouth of Corte Madera Creek, a water of the United States at 37° 56', 45" latitude and 122° 30', 16" longitude.
3. The report of waste discharge describes the existing discharge as follows:

Average Flow: 4.20 million gallons per day (mgd)  
Design Flow: 5.5 million gallons per day (mgd).
4. A Water Quality Control Plan for the San Francisco Bay Basin was adopted by the Board in April 1975. The Basin Plan contains water quality objectives for Corte Madera Creek and San Francisco Bay.
5. The beneficial uses of the Corte Madera Creek and San Francisco Bay are:
  - a. Recreation
  - b. Fish migration and habitat
  - c. Habitat and resting for waterfowl and migratory birds
  - d. Industrial and agricultural water supply
  - e. Esthetic enjoyment
  - f. Navigation
  - g. Shellfish propagation and harvesting for **non-human consumption**
6. The discharge is presently governed by Waste Discharge Requirements Order No. 74-197 and Order No. 76-44 which allows an interim discharge to Corte Madera Creek.

7. Section 301(b) of the Federal Water Pollution Control Act Amendments of 1972 requires all publicly-owned treatment works to achieve effluent limitations based upon secondary treatment no later than July 1, 1977. Secondary treatment has been defined by the EPA Administrator in 40 CFR 133, dated July 26, 1976.
8. This project involves the continued operation of a publicly-owned facility to provide sewerage service with negligible or no expansion of use beyond that previously existing. Consequently, this project will not have a significant effect on the environment based upon the exemption provided in Section 15101, Title 14, California Administrative Code.
9. The discharger and interested agencies and persons have been notified of the Board's intent to revise requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.
10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and to the provision of the Federal Water Pollution Control Act, as amended, and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

A. Prohibitions

1. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited (receiving water to wastewater flow).
2. There shall be no bypass or overflow of untreated wastewater to waters of the State, either at the treatment plant or from the collection system.
3. The average dry weather flow shall not exceed 4.5 mgd. Average shall be determined over three consecutive months per year. A flow increase to 5.5 mgd will be allowed in increments of 0.2 mgd based on satisfactory documentation to this Board of consistent compliance with the effluent and receiving waters limitations in effect, prior to receiving each incremental increase.

B. Effluent Limitations

1. Prior to achievement of secondary treatment as required by the Federal Water Pollution Control Act, and as defined by regulations of the Environmental Protection Agency, the following interim effluent limitations shall apply:

<u>Constituent</u>	<u>Units</u>	<u>30-Day Average</u>	<u>Maximum Daily</u>
a. BOD	mg/l lbs/day	35 3809	70 7618
b. Suspended Solids	mg/l lbs/day	45 4917	90 9834
c. Settleable Matter	ml/l-hr	-	0.5
d. Coliform Organisms	240 MPN/100 ml, moving median of five (5) consecutive daily samples, maximum. Any single sample shall not exceed a most probable number (MPN) of 10,000 total coliform bacteria per 100 ml when verified by a repeat sample taken within 48 hours.		

2. The discharge of an effluent containing constituents in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Maximum Daily</u>	<u>Instan- taneous Maximum</u>
a. BOD	mg/l lbs/day kg/day	5 546 248	7.5 - -	10 1093 496	
b. Suspended Solids	mg/l lbs/day kg/day	5 546 248	7.5 - -	10 1093 496	
c. Oil & Grease	mg/l lbs/day kg/day	10 1093 496	- - -	20 2185 991	
d. Settleable Matter	ml/l-hr	0.1	-	-	0.2
e. Turbidity	JTU	-	-	-	10.0

3. Chlorine residual of the discharge shall not exceed an instantaneous maximum of 0.0 mg/l.

4. The discharge shall not have pH of less than 6.5 nor greater than 8.5.

5. In any representative set of samples, the waste as discharged shall meet the following limit of quality:

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The survival of acceptable test organisms in 96-hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

6. Representative samples of the effluent shall not exceed the following limits more than the percentage of time indicated: (b)

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>50% of time</u>	<u>10% of time</u>
Arsenic	mg/l (kg/day)	0.01(0.189)	0.02(0.378)
Cadmium	mg/l (kg/day)	0.02(0.378)	0.03(0.567)
Total Chromium	mg/l (kg/day)	0.005(0.095)	0.01(0.189)
Copper	mg/l (kg/day)	0.2(3.78)	0.3(5.67)
Lead	mg/l (kg/day)	0.1 (1.89)	0.2(3.78)
Mercury	mg/l (kg/day)	0.001(0.018)	0.002(0.038)
Nickel	mg/l (kg/day)	0.1(1.89)	0.2(3.78)
Silver	mg/l (kg/day)	0.02(0.378)	0.04(0.756)
Zinc	mg/l (kg/day)	0.3(5.67)	0.5(9.46)
Cyanide	mg/l (kg/day)	0.1(1.89)	0.2(3.78)
Phenolic Compounds	mg/l (kg/day)	0.5(9.46)	1.0(18.92)
Total Identifiable Chlorinated Hydrocarbons	mg/l (kg/day) (a)	0.002(0.038)	0.004(0.076)

(a) Total Identifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, polychlorinated biphenyls, and other identifiable chlorinated hydrocarbons.

(b) The above limits are intended to be achieved through secondary treatment, source control and application of federal pretreatment standards.

7. At some point in the treatment process the waste shall not exceed a median MPN of coliform organisms of 2.2/100 ml as determined from the results of the previous consecutive 7 days for which analyses have been completed.
8. The arithmetic mean of values for BOD and Suspended Solids in effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of respective values for influent samples collected approximately the same times during the same period (i.e. 85 percent removal).

### C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place.
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended or deposited oil or other products of petroleum origin;
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State at any place within one foot of the water surface:
  - a. Dissolved oxygen                      5.0 mg/l minimum. Annual median - 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentrations of dissolved oxygen.
  - b. Dissolved sulfide                      0.1 mg/l maximum.
  - c. pH    Variation from natural ambient pH by more than 0.2 pH units.
  - d. Un-ionized                              0.025 mg/l annual median  
Ammonia as N                              0.4 mg/l maximum
  - e. Nutrients                                50 µg/l chlorophyll A when background levels exceed this requirements, then this discharge shall not add further nutrients.

### D. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 74-197 and Order No. 76-44 adopted by the Board on December 17, 1974 and May 4, 1976. Order No. 74-197 and 76-44 are hereby rescinded.

2. The discharger shall comply with the following time schedule to assure compliance with the specification of this Order:

- a. Compliance with effluent limitations B.2.a., B.2.b., B.2.c., B.2.d., B.2.e., B.5., B.7., B.8., Receiving Water C.1.c., C.2.d., and Prohibition A.1.

<u>Task</u>	<u>Completion Date</u>	<u>Report of Compliance</u>
Full Compliance	July 1, 1977	July 1, 1977

- b. Compliance with effluent limitation B.6.

<u>Task</u>	<u>Completion Date</u>	<u>Report of Compliance</u>
Status report of compliance	-	July 15, 1977
Documentation of compliance with effluent limitations	December 1, 1977	December 15, 1977

This Regional Board will consider amendment of the effluent limitation B.6. if the discharger demonstrates that compliance cannot be achieved through a program acceptable to the Board for source control and pretreatment standards.

- c. The discharger shall comply with all other effluent and receiving water limitations, prohibitions and provisions of this Order immediately.
- d. Compliance with Receiving Water Limitation C.1.a. and Discharge Prohibition A.2. is required in accord with terms of this Board's Order No. 71-43 and Order No. 71-52 or amendments thereto.
3. The discharger shall review and update annually its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willfull and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
4. If the discharger elects to comply with the specifications of this Order listed in provision D.2.a. by construction of separate treatment plant improvements rather than by participation in the subregional treatment and disposal program, this Board will consider adoption of more stringent requirements and/or prohibitions to protect shellfish beds for the harvesting of shellfish for human consumption.

5. The requirements prescribed by this Order amend the requirements prescribed by Order No. 71-43 and are effective on the date of compliance prescribed in the above time schedule PROVIDED HOWEVER that the following requirements prescribed in Order No. 71-43 shall remain in effect and be in addition to the requirements prescribed in this Order until Cease and Desist Order No. 71-52 is rescinded by this Board:

Waste Discharge Requirements A.2.a. pertaining to receiving water floating matter, and A.6. pertaining to bypassing of untreated sewage

6. The discharger shall comply with the Self-Monitoring Program as ordered by the Executive Officer.
7. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" except B.3.
8. This Order expires on June 15, 1982. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 21, 1977.

FRED H. DIERKER  
Executive Officer

File No. 2159.5020

Attachments:

Standard Provisions  
Reporting Requirements  
and Definitions  
Self-Monitoring Program Part A & B